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PM82/0717

EXAMINER

PECHHOLD, A

ART UNIT

PAPER NUMBER

3673

DATE MAILED:

07/17/01

Commissioner of Patents and Trademarks

[illegible]

Office Action Summary

Application No.

09/592,398

Applicant(s)

CRUPI, FRANCESCO A.

Examiner

Alexandra K Pechhold

Art Unit

3673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133)
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexandra Pechhold whose telephone number is (703) 305-0870. The examiner can normally be reached on Mon-Thurs. from 8:00am to 5:30pm and alternating Fridays from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached on (703)308-3870. The fax phone number for this Group is (703) 305-3597.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1113.



Thomas B. Will
Supervisory Patent Examiner
Group 3600

AKP
7/10/01

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 7, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Cutler (US 4,124,325).

Regarding claim 1, Cutler discloses a machine (310) in the embodiment in Figs. 12 and 13, having heaters (312, 314), followed by scarifying blades (321), followed by a mill seen as augers (330, 331), followed by a rejuvenating fluid sprayer seen as liquid dispensers (340, 341), and then a mixer seen as pug mill (360) (Col 9, lines 3-48). The pug mill (360) comprises a first stage shell, seen as the backup plate (362), which allows for a downwardly facing bottom opening, an inlet opening through a forward face of the shell, a first stage shaft and a plurality of paddles (361) shown in Figs. 12 and 13 (Col 9, lines 41-48). Since Cutler discloses an agitating pug-mill rotor (360) (Col 9, line 49) that that agitates and intermingles new hot mix and old road material (Col 9, lines 41-46), there is inherently a rotator.

Regarding claim 2, Cutler discloses a second stage mounted to follow the first stage, seen as the spreader augers (370, 371) which follow the agitating

pug-mill rotor (360) (Col 9, lines 49-52) as shown in Figs. 12 and 13. The downwardly opening second stage shell is seen as the shell of the machine (310). The second stage shaft is seen in Figs. 12 and 13 as the shaft of the spreaders augers (370, 371). A plurality of paddles are shown in Figs. 12 extending radially from the shaft. Cutler notes that the augers (370, 371) are rotated to spread and level the new composition (Col 9, lines 49-52), therefore having some type of rotator means.

Regarding claim 7, Cutler discloses a machine (310) having a first pug mill, seen as pug mill (360) in Figs. 12 and 13, attached to the machine (310). The bottom of the pug mill (360) has an open face adjacent to an underlying surface as shown in Fig. 13. The pug mill (360) has a first paddle shaft as seen in Figs. 12 and 13. The method of restoring an asphalt is disclosed in claim 4, wherein liquid asphalt is sprayed upon the loose material, liquid rejuvenating material is applied, and new asphalt mix is added, and thereafter pug-milling the loose existing material and new asphalt mix and rejuvenating material, and then spreading the mixed loose material and liquid asphalt on the roadway.

Regarding claim 8, Cutler discloses a second pug mill following the first pug mill, seen as spreader augers (370, 371) which follow the agitating pug-mill rotor (360) (Col 9, lines 49-52) as shown in Figs. 12 and 13. The spreader augers (370, 371) have an open face adjacent the underlying surface as seen in Fig. 13, and an inlet at the front of the augers where the material is received. The second paddle shaft is seen in Figs. 12 and 13 as the shaft of the spreaders augers (370, 371). A plurality of paddles are shown in Figs. 12 extending radially

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from the shaft. Cutler notes that the augers (370, 371) are rotated to spread and level the new composition (Col 9, lines 49-52), thereby discharging the further blended material.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cutler (US 4,124,325).

Regarding claims 3 and 5, Cutler discloses motors (125, 131) rotationally coupled to the screw shafts (Col 6, lines 14-39) in the mixing screws (40, 41) in the embodiment of Figs. 1 and 2. Cutler fails to disclose the means for the rotational operation of the augers (330, 331) and pug mill (360) in the embodiment of Figs. 12 and 13. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the augers and pug mill of Cutler to be rotationally coupled to motor, since Cutler discloses the use of motors in another embodiment, and it is also well known in the art to drive rotating augers and mills by motors.

Regarding claims 4 and 6, Cutler discloses the limitations of the claimed invention except for a motor sprocket mounted to the motor and coupled by chain. Cutler discloses screed sections (56a-d) adjustable relative to one

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another to allow the sections to be relatively pivotable about axes between the sections by the use of turnbuckles tied together by a common drive chain and sprocket arrangement, thus providing uniform flexure of the forward and rear portions of the screed sections (Col 7, lines 59-68 and Col 8, lines 1-22). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the augers and pug mill of Cutler to have a motor rotationally coupled to the shaft or shafts by a motor sprocket coupled by a chain, since Cutler discloses the use of a chain and sprocket arrangement in joining screed sections (Col 7, lines 59-68 and Col 8, lines 1-22), which provides an operable connection between axes to be able to control them simultaneously.

Regarding claim 9, Cutler discloses the limitations of the claimed invention except for the first and second paddle shafts rotated simultaneously by a motor rotationally coupled thereto by a chain and sprocket drive arrangement. Cutler discloses motors (125, 131) rotationally coupled to the screw shafts (Col 6, lines 14-39) in the mixing screws (40, 41) in the embodiment of Figs. 1 and 2. Cutler fails to disclose the means for the rotational operation of the augers (330, 331) and pug mill (360) in the embodiment of Figs. 12 and 13. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the augers and pug mill of Cutler to be rotationally coupled to motor, since Cutler discloses the use of motors in another embodiment, and it is also well known in the art to drive rotating augers and mills by motors. Cutler discloses screed sections (56a-d) adjustable relative to one another to allow the sections to be relatively pivotable about axes between the sections by the use of

turnbuckles tied together by a common drive chain and sprocket arrangement, thus providing uniform flexure of the forward and rear portions of the screed sections (Col 7, lines 59-68 and Col 8, lines 1-22). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the augers and pug mill of Cutler to have a motor rotationally coupled to the shaft or shafts by a motor sprocket coupled by a chain, since Cutler discloses the use of a chain and sprocket arrangement in joining screed sections (Col 7, lines 59-68 and Col 8, lines 1-22), which provides an operable connection between axes to be able to control them simultaneously.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cutler (US 4,011,023), Sindelar et al (US 4,347,016), Gutman et al (US 3,843,274), Yates (US 4,545,700), Jakob (US 4,946,307), Mihara (US 4,682,909), Guillon (US 4,971,476), Wirtgen (US 5,741,085), Lee (US 5,080,524), Yates (US 6,220,782B1), Cutler (US 4,784,518), Vural (US 5,967,695), Cutler (3,907,450), Benedetti (US 3,970,404), Wiley (US 5,791,814), Wiley (US 5,472,292), Butch (US 4,793,730), and Crabbi (US 4,974,993) all disclose methods and/or apparatuses for asphalt recycling or renewing.